

AMENDMENTS TO THE CLAIMS

1. (Currently amended) ~~A device for relieving pain associated with the vertebrae of the cervical spine and surrounding tissues and structures, by maintaining and/or adding distraction between adjacent cervical vertebrae when positioned between the spinous processes of adjacent cervical vertebrae, without detracting from the rotation of the cervical vertebrae relative to each other, the~~ A spinal implant comprising:

a wedge-shaped spacer having a longitudinal axis and first and second end portions; said spacer further having an anterior edge and a posterior edge and elongated therebetween in a first direction generally transverse to said longitudinal axis;

a first wing disposed proximate said first end portion and disposed generally transverse to said longitudinal axis; said first wing elongated from a posterior edge to an anterior edge thereof in said first direction;

a wedge-shaped wing; and

a wedge-shaped distraction guide disposed more proximate said second end portion than said first end portion and tapering away from said first wing;

a second wing disposed proximate said second end portion and said distraction guide, said second wing disposed generally transverse to said longitudinal axis and removably mounted to at least one of said spacer and said distraction guide; said second wing elongated from a posterior edge to an anterior edge thereof in said first direction.

2. (Currently amended) The implant of claim 1 wherein the anterior and posterior edges of said spacer are generally rounded, said spacer further having generally linear surfaces disposed between said anterior and posterior edges disposed so as to diverge

from each other toward said posterior edge so that said spacer has smooth, flat surfaces and smooth, rounded edges to create creates a wedge for varying distraction of adjacent cervical vertebrae.

3. (Currently amended) The implant of claim 1 wherein ~~the cross-sectional shape of the wing has smooth, flat surfaces and smooth, rounded edges to create a wedge for varying distraction of adjacent cervical vertebrae~~ said second wing comprises a hole therethrough disposed along said longitudinal axis and sized to allow said second wing to be received over said distraction guide with a tip of said distraction guide passing through said hole.

4. (Currently amended) The implant of claim 1 wherein the first wing is continuous with the spacer.

5. (Original) The implant of claim 1 wherein the distraction guide is continuous with the spacer.

6. (Currently amended) The implant of claim 1 wherein the spacer is rotatable about said longitudinal axis so as to variably position a narrower portion thereof relative to said first wing.

7. (Currently amended) The implant of claim 1 ~~including a second wing wherein, in cross-sectional view of said spacer normal to said longitudinal axis, a largest height of said posterior edge of said spacer taken perpendicular to a theoretical line extending between said anterior and posterior edges is greater than a corresponding largest height of said anterior edge of said spacer.~~

8. (Original) The implant of claim 1 wherein the spacer can rotate relative to the wing and the distraction guide.

9-10. (Canceled)

11. (Currently amended) The implant of claim 1 wherein said ~~A device for relieving pain associated with the vertebrae of the cervical spine and surrounding tissues and structures, by maintaining and/or adding distraction between adjacent cervical vertebrae when positioned between the spinous processes of adjacent cervical vertebrae, without detracting from the rotation of the cervical vertebrae relative to each other, the implant comprising:~~

~~a wedge-shaped distraction guide;~~

~~a wedge-shaped spacer associated with the wedge-shaped distraction guide, which spacer, when urged between the spinous process of the adjacent cervical vertebrae, allows flexion but not extension of the neck and creates a contact surface with the bone of the spinous processes that increases as the wedge-like spacer moves anteriorly, whereby the implant distributes the distraction forces on the spinous processes over the contact surface; and~~

~~a wedge-like wing extending from and continuous with one end of the spacer to maintain lateral placement of the spacer.~~

12-20. (Canceled)

21. (Currently amended) The implant of claim ~~18~~ 1 wherein the spacer is rotatable about said longitudinal axis.

22-25. (Canceled)

26. (Currently amended) The implant in claim ~~43~~ 1 wherein the first wing and the second wing ~~have an anterior side and a posterior side, and the anterior side of the first wing and of the second wing~~ are angled outward relative to each other to accommodate the anatomy of the adjacent spinous processes of the cervical spine.

27-35. (Canceled)

36. (Currently amended) A method for implanting an implant between the spinous processes of ~~cervical vertebrae~~ comprising the steps of:

inserting a first portion of the implant including a spacer and a distraction end

laterally between adjacent spinous processes; said spacer having:

a longitudinal axis and first and second end portions;

an anterior edge and a posterior edge and elongated therebetween in a

first direction generally transverse to said longitudinal axis;

said first portion comprising a first wing disposed proximate said spacer first end

portion and disposed generally transverse to said longitudinal axis;

inserting a second portion of the implant including a second wing laterally from

an opposite direction from the insertion of the first portion such that said

second wing is disposed proximate said second end portion and said

distraction end and generally transverse to said longitudinal axis; and

fastening the second portion to the first portion;

wherein, after said fastening, said first wing, said second wing, and said spacer
are elongated in a posterior to anterior direction with respect to the adjacent
spinous processes.

37. (Original) The method of claim 36 wherein the fastening step includes interference-fitting the second portion onto the first portion.

38-39. (Canceled)

40. (Original) The method of claim 36 including implanting the implant without severing the ligamentum nuchae.

41. (Original) The method of claim 36 including implanting the implant without altering the spinous processes.

42-61. (Canceled)

62. (Original) The method of claim 36 including implanting the implant without severing the supraspinous ligament.

63-65. (Canceled)

66. (New) The method of claim 36 wherein said inserting said first portion of the implant between adjacent spinous processes comprises inserting said first portion of the implant between adjacent spinous processes of cervical vertebrae.

67. (New) The method of claim 36 wherein said inserting said second portion of the implant comprises inserting said distraction end into a hole in said second wing.

68. (New) The method of claim 36 wherein said anterior and posterior edges of said spacer are generally rounded, said spacer further having generally planar surfaces disposed between said anterior and posterior edges disposed so as to diverge from each other toward said posterior edge; wherein, after said fastening, said planar surfaces contact respective adjacent spinous processes.

69. (New) The method of claim 36 wherein said inserting a first portion of the implant comprises rotating said spacer about a longitudinal axis thereof.

70. (New) The method of claim 36 wherein said inserting a first portion of the implant comprises orienting a narrower cross-sectional portion of said spacer anteriorly and an thicker cross-sectional portion of said spacer posteriorly.

71. (New) The implant of claim 2 wherein the second wing has a rounded anterior edge and a rounded posterior edge and is elongated therebetween in said first direction; said second wing further having generally linear surfaces disposed between said second wing anterior and posterior edges disposed so as to diverge from each other toward said second wing posterior edge.

72. (New) The implant of claim 71 wherein the anterior and posterior edges of said first wing are generally rounded, said first wing further having generally linear surfaces disposed between said first wing anterior and posterior edges disposed so as to diverge from each other toward said first wing posterior edge.

73. (New) The implant of claim 7 wherein the second wing has an anterior edge and a posterior edge corresponding to said anterior and posterior edges of said spacer,

respectively; wherein, in cross-sectional view of said second wing generally normal to said longitudinal axis, a largest height of said posterior edge of said second wing taken perpendicular to a theoretical line extending between said second wing anterior and posterior edges is greater than a corresponding largest height of said anterior edge of said second wing.

74. (New) The implant of claim 73 wherein, in cross-sectional view of said first wing generally normal to said longitudinal axis, a largest height of said posterior edge of said first wing taken perpendicular to a theoretical line extending between said first wing anterior and posterior edges is greater than a corresponding largest height of said anterior edge of said first wing.